

# NASA's Occupational Health Electronic Health Record System: Project Overview

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# EHRS Project Goals

- **Standardize Occupational Health's Information Management**
- **Generate efficiencies and cost-savings**
- **Align to Federal e-Government**
- **Improve the longitudinal understanding of the health status of NASA's workforce**

# EHRS Successfully Deployed

**Will provide NASA the ability to:**

- **facilitate 'real-time' identification of critical health issues**
- **decrease the likelihood of medical errors occurring**
- **assess the effectiveness of health promotion programs**
- **advance standardization and collaboration**

# Evolving into a Successful EHRS

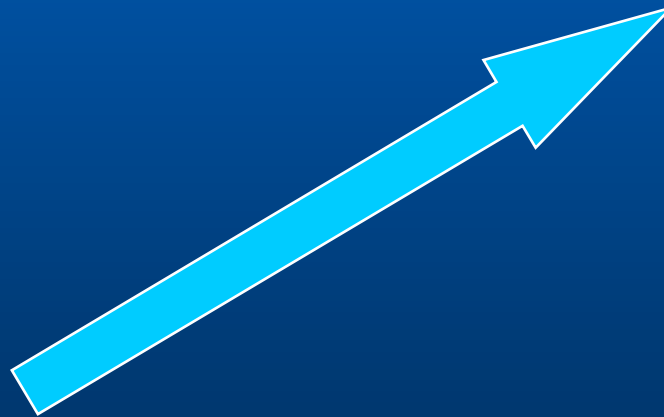
Phases of Change to Project

Evaluate  
Implementation  
Approval  
Formulation

Awareness Desire Knowledge Ability Reinforcement

Phases of Change to Employees

Successful  
EHRS



# How Will We Get There?

- **IHS RPMS with OH Module**
- **Strengths**
  - Collaborative
  - Credible
- **Constraints**
  - Time
  - Allocated and committed resources

# EHRIS Project Team/Resources

- EHRIS Project Team
  - Technical Investigator
  - Lead
  - System Administrator
  - Clinical Advisors
- Project Support
  - Steering Committee
  - Task Force
- Equipment / Resources
  - Servers
  - Clients
  - Peripheral Hardware
  - Software

# Leadership Roles

- **Steering Committee**
- **Project Sponsor**
- **Project Champion**
- **Other Stakeholders**



# NASA's Mission and Vision

- NASA's Vision
  - To improve life here, to extend life there, and to find life beyond.
- NASA's Mission
  - To understand and protect our home planet, to explore the universe and search for life, to inspire the next generation of explorers, ... as only NASA can.
- **Where does NASA Occupational Health fit into NASA's Vision and Mission?**
  - **NASA Strategic Plans state that NASA will ensure that all NASA work environments, on Earth, and in Space, are safe, healthy, environmentally sound and secure. It is the responsibility of the NASA Chief Health and Medical Officer to evaluate, monitor, and improve the occupational health of the NASA workforce. The objective is to eliminate the incidence of occupational health injuries and illness for the NASA workforce.**



# EHRS “Vision” Lessons

- **Critical to success**
- **Reveal it**
- **Supports the Organization’s Mission & Vision**
- **Championed and embraced**
- **Limited when not communicated**
- **Concerns OH delivery, not technology**
- **Think outside the box**
- **Dynamic and evolving**

# The State of the Union 2006



**Although it was only one sentence, President Bush pronounced his continued support of health information technology in the State of the Union address.**

**“We will make wider use of electronic records and other health information technology, to help control costs and reduce dangerous medical errors,” he said.**

**The statement was similar to the one sentence pronouncement last year regarding health IT. In his 2004 address, however, the President expressed his desire that most Americans have an electronic health record by 2014.**

President George W. Bush; *State of the Union Address*; January 31, 2006

# Defining EHRS

- E-GOV Initiative
- HL7
- Other Standards
  - SNOMED
  - LOINC

# AHIMA & AMIA suggest four areas that could use presidential action:

- increased support and efforts to formally adopt EHR standards
- accelerated efforts to upgrade and ensure the coordination of health information data standards
- active support for House passage of S. 306, the “Genetic Information Nondiscrimination Act,” and
- increase funding for education and training in healthcare informatics and information management

# Drivers for change...to EHRS

- Improved quality of health care through availability and links to knowledge sources
- Enhanced patient safety with context-sensitive reminders and alerts, clinical decision support, etc.
- Supporting health maintenance, preventive care, and wellness promotion through patient reminders, educational materials, and health summaries
- Improved productivity with data capture and reporting technology and streamlined processes.
- Improving clinical outcomes
- Managing patient health information security and patient confidentiality

# OCIO Support for EHRS

Direct Care	DC1.0	Care Management
	DC2.0	Clinical Decision Support
	DC3.0	Operations Management and Communication
Supportive	S1.0	Clinical Support
	S2.0	Measurement, Analysis, Research, Reporting
	S3.0	Administrative and Financial
Information Infrastructure	I 1.0	EHR Security
	I 2.0	EHR Information and Records Management
	I 3.0	Unique identity, registry, and directory services
	I 4.0	Support for Health Informatics & Terminology Standards
	I 5.0	Interoperability
	I 6.0	Manage business rules
	I 7.0	Workflow

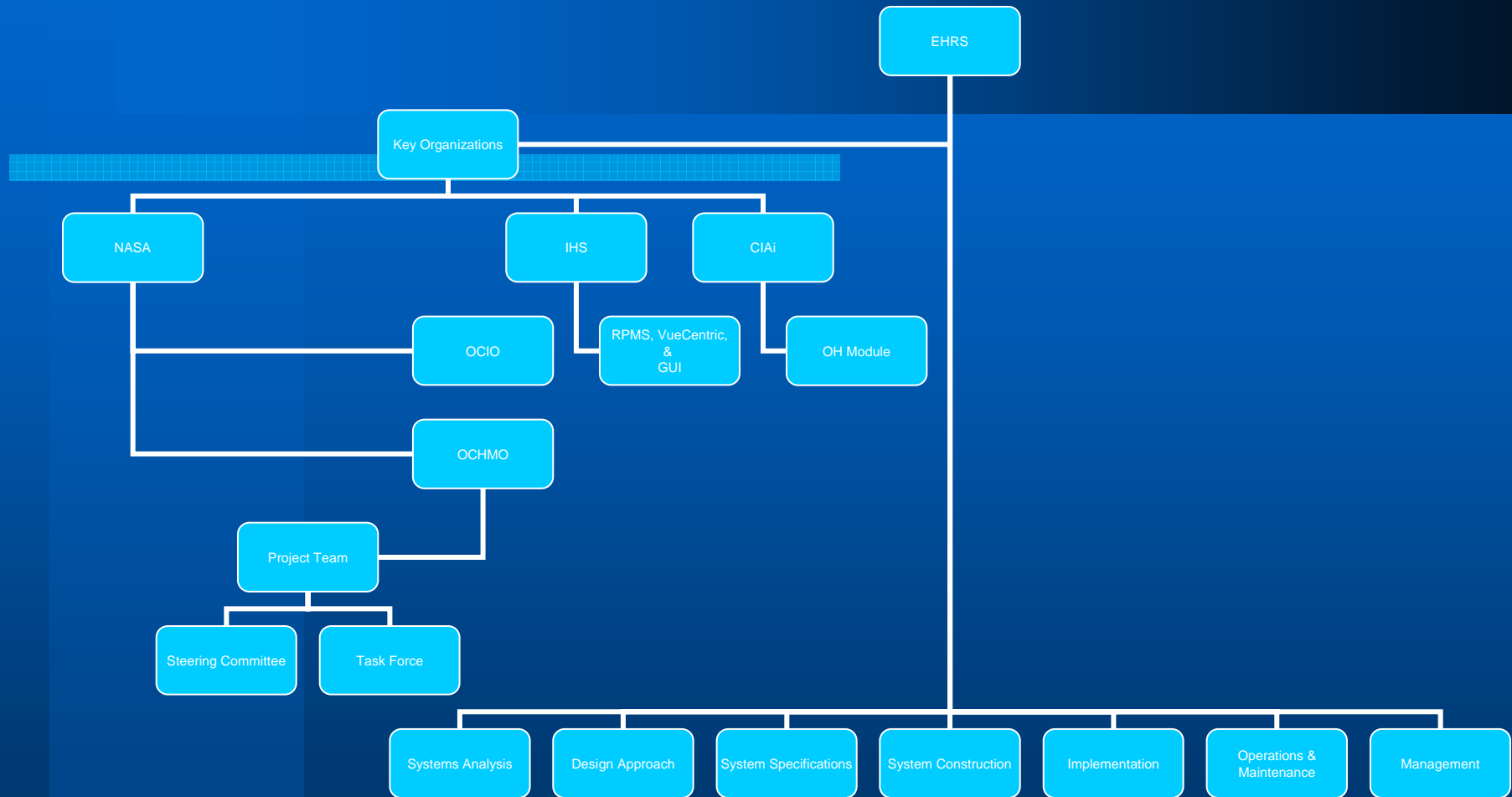
← Items in Blue

# Mapping Drivers to Function

- Improve HC quality
- patient safety
- Improve clinical outcomes
- Improve clinic productivity
- PHI security & privacy

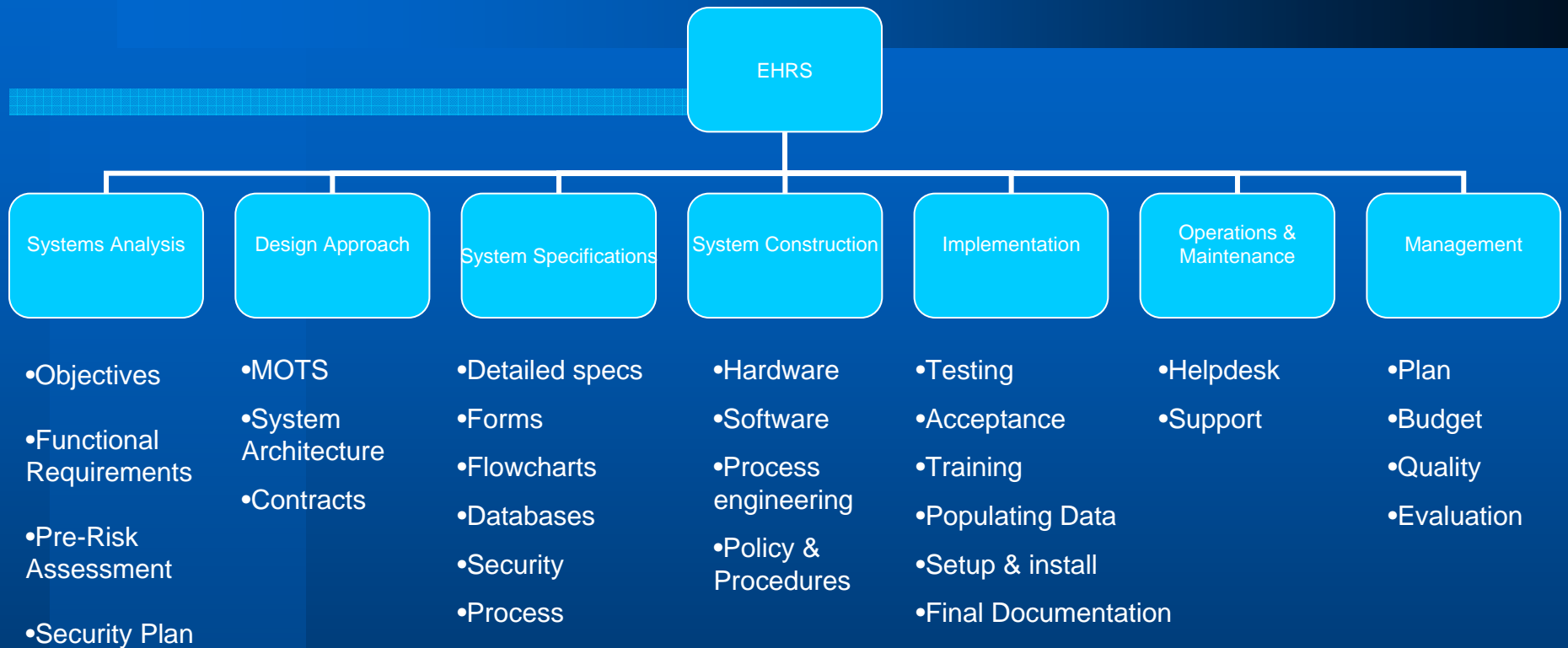
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# Work Breakdown Schedule





# Work Breakdown Schedule



Formulation

Approval

Implementation

Evaluate



# Related Documents & Information

- EHRIS Website
  - [www.ohp.nasa.gov/ehrs](http://www.ohp.nasa.gov/ehrs)
- Submit questions, concerns
  - John Eckmann, EHRIS Project Lead
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    - john.eckmann-1@ksc.nasa.gov